

REMARKS/ARGUMENTS

Claim Amendments

The amendments of claims 1, 9, 18, and 23 are based on the disclosure of specification, paragraphs [0021], [0022], [0024], [0025] and FIG. 4, therefore, claims 2 and 20 are amended
5 accordingly. No new matter is introduced.

The amendments of claim 13 are based on the disclosure of specification, paragraphs 0025 and FIG. 5. No new matter is introduced.

The newly added claim 27 incorporates limitations of original claim 1 with additional limitations fully supported by the disclosure of specification and FIG. 4. No new matter is
10 introduced.

The newly added claim 28 incorporates limitations of original claim 1 with additional limitations fully supported by the disclosure of specification, paragraphs [0022], [0024], and FIG. 4. No new matter is introduced.

Claim Rejections - 35 USC 102

15 Claims 1, 2, 5-11, 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sogabe et al (2002/0027845, hereinafter Sogabe). Applicant respectfully traverses the rejection made by Examiner for at least the following reasons.

Claim 1

20 Regarding claim 1, Sogabe fails to disclose the limitation “**providing a lookup table defining a plurality of predetermined search regions**” as recited in the amended claim 1. Examiner deems that a storage content of Sogabe’s first synchronization signal address storage section (24) is considered equivalent with the claimed “lookup table”. The applicant asserts that the claimed lookup table **is predetermined**. For example, as disclosed in
25 paragraph [0020] of the present application, the claimed lookup table is acquired based on the **experimental statistics**, and is stored in a read-only memory (550). The storage content of Sogabe’s address storage section (24), however, is built in a real-time manner using Sogabe’s

synchronization signal detection section (22), data counter (21), and address storage section (24) **according to the input signal**. As described in paragraphs 75 and 78 of Sogabe stating “Then, the data counter 21 outputs an address of the input signal to the first synchronization signal address storage section 24 and the next synchronization signal address storage section 27.” and “The first synchronization signal address storage section 24 stores the address output from the data counter 21 in response to the detection signal resulting from the first synchronization signal.” respectively, Sogabe’s address storage section (24, deemed as a lookup table by Examiner) stores an address of the input signal, but the claimed lookup table utilized to determine a search region defines **a plurality of predetermined search regions**, which would not vary with the digital encoded signal. Further, since the first synchronization signal address storage section 24 stores **an address** of the input signal from the data counter 21, it is different from **the predetermined search regions of the lookup table** as claimed in claim 1 of the present invention. The applicant, therefore, asserts that Sogabe fails to disclose the limitation “**providing a lookup table defining a plurality of predetermined search regions**” as recited in applicant’s amended claim 1. For at least the forgoing reasons, claim 1 should be found allowable over Sogabe, and the rejection based thereon should be withdrawn.

Claims 2, 6 and 8

Claims 2, 6 and 8 are dependent upon claim 1, and should be allowable if claim 1 is found allowable.

Claims 5 and 7

Regarding claims 5 and 7, Examiner deems that the “**searching**” is considered equivalent with the claimed limitation “**backward-searching**”. The applicant disagrees with Examiner’s point of view for the reasons set forth hereinafter.

Please note that, in the search region, there might be more than one signals having data pattern the same as the predetermined data pattern “0xff”. Searching the predetermined data

pattern in a special way, backward-searching, is helpful to find the “true” synchronization signal, as disclosed in the paragraph [0024] of the present application. The applicant, therefore, asserts that Sogabe fails to disclose the limitation “locating the synchronization signal of the next frame comprises **backward-searching** a predetermined data pattern in the search region” as recited in the claims 5 and 7. For at least the forgoing reasons, claims 5 and 7 should be found allowable over Sogabe, and the rejection based thereon should be withdrawn. In addition, claims 5 and 7 are dependent upon claim 1, and should be allowed if claim 1 is found allowable.

10 Claim 9

In light of above arguments of claim 1, the applicant asserts that claim 9 should be found allowable over Sogabe.

Claims 10, 11, 13, 15 and 17

15 Claims 10, 11, 13, 15 and 17 are all dependent upon claim 9, and should be allowable if claim 9 is found allowable.

Claims 14 and 16

20 In light of above arguments of claims 5 and 7, the applicant asserts that claims 14 and 16 should be found allowable over Sogabe. In addition, claims 14 and 16 are both dependent upon claim 9, and should be allowed if claim 9 is found allowable.

Claim Rejections - 35 USC 103

25 Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sogabe et al in view of Lokhoff (5,777,992). Applicant respectfully traverses the rejection made by Examiner for at least the following reasons.

Claim 18

Regarding claim 18, the applicant points out that neither Sogabe nor Lokhoff discloses the limitations “providing a lookup table **defining a plurality of predetermined search regions**” and “locating the synchronization signal of a next frame by **backward-searching** a predetermined data pattern in the search region” as recited in applicant’s amended claim 18. In light of above arguments of claims 1, 5, and 7, the applicant asserts that claim 18 should be found allowable over the combined teaching of Sogabe and Lokhoff. Withdrawal of the rejection to claim 18 is respectfully requested.

Claims 19-22

Claims 19-22 are all dependent upon claim 18, and should be allowable if claim 18 is found allowable.

Claim 23

Regarding claim 23, the applicant points out that neither Sogabe nor Lokhoff discloses the limitation “providing a lookup table **defining a plurality of predetermined search regions**” as recited in the amended claim 23. In light of above arguments of claim 1, the applicant asserts that claim 23 should be found allowable over the combined teaching of Sogabe and Lokhoff. Withdrawal of the rejection to claim 23 is respectfully requested.

Claim 24

In light of above arguments of claims 5 and 7, the applicant asserts that claim 24 should be found allowable over the combined teaching of Sogabe and Lokhoff. In addition, claim 24 is dependent upon claim 23, and should be allowed if claim 23 is found allowable.

Claim 25

Claim 25 is dependent upon claim 23, and should be allowed if claim 23 is found allowable.

Patentability of New Claims 27 and 28

Claim 27

Regarding claim 27, the applicant points out that neither Sogabe nor Lokhoff discloses the limitation “the search region having **a plurality of slots and a length shorter than a**
5 **frame length**” as recited in the claim 27. In Sogabe’s disclosure (in paragraphs [0109], [0131], FIG. 5A and FIG. 5B), a predetermined searching area can be equal to 2K byte and **comprises a plurality of frames**. In Sogabe’s disclosure, for determining whether an input signal is an MP3 signal, the input signal should be examined by **a small number of frames** (the predetermined searching area) to increase the probability of correctly determination. In
10 other words, Sogabe fails to teach or suggest, implicitly or explicitly, that the predetermined searching area could be **shorter than one frame length**.

In addition, if Examiner deems that the storage content of Sogabe’s next synchronization signal address storage section 27 is considered equivalent with the claimed search region, the applicant disagrees with the point of view for at least the reason set forth below. The storage
15 content of Sogabe’s address storage 27 is **an exact address** obtained by calculation. Sogabe’s calculation process is the same as the calculation process described in applicant’s admitted related art (specification paragraph 0003-0005 of applicant’s disclosure), and has the same drawbacks that the instant application wants to overcome. The claimed search region, however, is predetermined, such as the experimental statistics, and is a rough region **having a**
20 **plurality of slots and a length shorter than a frame length** (see applicant’s FIG. 4 showing that each search range, delimited by a starting position and an ending position, has three slots as most). Upon careful review of Lokhoff’s disclosure, the applicant, however, finds no description pertinent to the limitation of claimed search region.

For at least the reasons above, the applicant asserts that claim 27 is not taught or
25 suggested by the cited references, alone or in combination.

Claim 28

Regarding claim 28, the applicant points out that neither Sogabe nor Lokhoff

discloses the limitation “the lookup table **is not obtained from the digital encoded signal**” as recited in the claim 28. Examiner deems that Sogabe’s content of storage (24) is considered equivalent with the claimed limitation “lookup table”. In light of the arguments of claim 1, the content of Sogabe’s the first synchronization signal address storage section 24 **is**
5 **obtained by analyzing the input signal**. The claimed lookup table, however, comprises predetermined contents and may be **acquired based on the experimental statistics** rather than obtained from the digital encoded signal. Upon careful review of Lokhoff’s disclosure, the applicant, however, finds no description pertinent to the limitation of claimed lookup table.

10 For at least the reasons above, the applicant asserts that claim 28 is not taught or suggested by the cited references, alone or in combination.

Conclusion

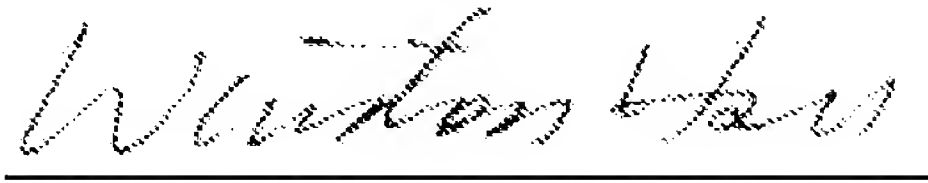
For the reasons as described above, Applicant believes that Claims 1, 9, 18, and 23
15 are allowable over cited references. Insofar as Claims 1, 9, 18, and 23 are allowable, Claims dependent upon respective Claims 1, 9, 18, and 23 including every claimed element thereof, are also allowable on their own merits in claiming additional limitations not included in Claims 1, 9, 18, and 23.

Withdrawal of the rejections and allowance of the claims, are respectfully requested.
20 Applicant has made every effort to place the present application in condition for allowance. It is therefore earnestly requested that the present application, as a whole, receive favorable consideration and that all of the claims be allowed in their present form.

Should the Examiner feel that further discussion of the application and the Amendment is conducive to prosecution and allowance thereof, please do not hesitate to
25 contact the undersigned at the address and telephone listed below.

Appl. No. 10/710,872
Amdt. dated February 04, 2008
Reply to Office action of November 21, 2007

Sincerely yours,



Date: 02.04.2008

Winston Hsu, Patent Agent No. 41,526

5 P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

- 10 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)